

October 10, 1950.

Dr. E. H. Beutner,
Dept. Bacteriology,
University of Pennsylvania,
Philadelphia 4, Penna.

Dear Dr. Beutner:

In reply to your letter of the 7th, I am very pleased to send you a culture of *Escherichia coli*, strain K-12. I will be very interested to hear your findings, as we have been undertaking a limited cytological study.

If, as one might suspect, you are planning to seek morphological evidence for the fusion process which is inferred from the genetic results, I hope that you will keep in mind the infrequency with which it must occur, a fact which has discouraged me from even attempting to find it with currently available material. If you would like to run a recombination experiment which illustrates this frequency, I shall be very happy to send you appropriate mutant strains. The experiments are quite simple (and have been carried out several times and places as class exercises), and require no facilities except those needed to wash cells (i.e. a centrifuge), and a moderately clean synthetic agar medium.

From our own studies, the majority of the cells of K-12 do not deviate from the patterns described by Robinow for other strains.

Yours sincerely,

Joshua Lederberg,
Associate Professor of Genetics